



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,062	10/30/2003	Toshiaki Zen	K2635.0076	5914
<div>32172 7590 08/22/2007</div> <div>DICKSTEIN SHAPIRO LLP</div> <div>1177 AVENUE OF THE AMERICAS (6TH AVENUE)</div> <div>NEW YORK, NY 10036-2714</div>				
			<div>EXAMINER</div> <div>MACK, SYLVIA</div>	
			<div>ART UNIT</div> <div>2617</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>08/22/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/696,062

Applicant(s)

ZEN ET AL.

Examiner

Sylvia Mack

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Russell (US Pub. 2004/0249915).

Regarding claim 1, Russell teaches a mobile station (Abstract, pages 1, paragraphs [0002], [0004]) comprising:

a measuring unit which measures a present position of said mobile station using radio wave (GPS Sniffer/Scanner Receiver 103 (measuring unit), which uses radios waves, determines position of device (mobile station) [page 4, paragraphs [0056] – [0057], page 5, paragraph [0061], Fig. 2A) ;

a map database which stores a map data, which comprises an identifier to identify of each of a plurality of wireless LAN access points connecting to a wireless communications network, a connection data to communicate with said each wireless LAN access point (Configuration database 105 (map database) comprises a Location Profile/Table 200A and the User Personality Profile/Table database 200B (page 4, paragraphs [0056] – [0057], page 5, paragraph [0065], Fig. 2A, Fig. 2B). The Location

Art Unit: 2617

Profile/Table 200A consist of the Network Coverage Map data 203 (map data) representing the coverage area for each contracted network, wireless network, such as IEEE 802.11 0 wireless LAN (Abstract, page 5, paragraph [0066], Fig. 2A, Fig. 2B). The User Personality Profile/Table database 200B consist of the Network Profile data 205, network identifiers, used to identify the access points within the contracted network, such as IEEE 802.11 - wireless LAN network. In addition the Network Profile data 205 also provides connection information to facilitate communication with the WLAN access point (Abstract, page 5, paragraphs [0065], [0067], page 6, paragraph [0069], Fig. 2A, Fig. 2B)); and

a position data indicating a setting position of said each wireless LAN access point (Configuration database 105 also comprise a Location Profile/Table 200A (page 4, paragraphs [0056] – [0057], page 5, paragraph [0065]). The Location Profile/Table 200A consist of the GPS data, GEO, 201 (position data) (page 5, paragraph [0065], Fig. 2A). The GPS data or GEO 201 stores geographical position of the device in relation to the contracted network , wireless network, such as wireless LAN network which comprises numerous access points providing access and connection to the wireless LAN network [Abstract, page 4 paragraph [0052], page 5, paragraph [0066], Fig. 2A].

a control unit which refers to said map database based on said present position of said mobile station to choose an optimal wireless LAN access point from said plurality of wireless LAN access points based on said present position of said mobile station (Digital Signal processor Platform 104 (control unit) receives information from the Network Profile data 205 to select the appropriate WLAN access point based on the

Art Unit: 2617

position of device (mobile station) in the specified wireless network [page 4, paragraphs [0056] – [0057], page 5, paragraph [0062], page 5, paragraph [0062], page 6, paragraph [0069], Fig. 2A) ; and

a communication unit which communicates with another station based on said connection data of said optimal wireless LAN access point (Widesband Transceiver Platform 100 (communication unit) which communicates with contracted networks, such as WLAN network, and the access points within the contracted networks as well as any other device with transmitting/receiving capabilities page 4, paragraphs [0056] – [0057], pages 4 –5, paragraphs [0058] – [0059], Fig. 2A)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2, 3, 15 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (US Pub. 2004/0249915) in view of H. Gray (US Pub. 2004/0203873) henceforth Gray.

Regarding claim 15, Russell teaches a method of an automatic connection to a wireless LAN access point in a wireless LAN communication system (page 3, paragraph [0034] – [0035], page 10, paragraph [0106]), comprising:

(a) measuring a present position of a mobile station by a radio wave (GPS Sniffer/Scanner Receiver 103 (measuring unit), which uses radios waves, determines position of device (mobile station) [page 4, paragraphs [0056] – [0057], page 5, paragraph [0061], Fig. 2A) ;

choosing an optimal wireless LAN access point based on said present position from a plurality of wireless LAN access points by referring a map database storing a map data which stores an identifier of each of said plurality of wireless LAN access points connected to a wireless communications network, a connection point of said each wireless LAN access point and a connection data needed to communicate with said each wireless LAN access point (Configuration database 105 comprises the User Personality Profile/Table database 200B (page 4, paragraphs [0056] – [0057], page 5, paragraph [0065]. The User Personality Profile/Table database 200B (map database) consist of the Network Profile data 205, network identifiers, (map data) used to identify the access points within the contracted network, such as IEEE 802.11 - wireless LAN network. In addition the Network Profile data 205 also provides connection information

Art Unit: 2617

to facilitate communication with the WLAN access point (Abstract, page 5, paragraphs [0065], [0067], page 6, paragraph [0069], Fig. 2A));

communicating with a counter station based on said connection data of said optimal wireless LAN access point (Widesband Transceiver Platform 100 (communication unit) which communicates with contracted networks, such as WLAN network, and the access points within the contracted networks as well as any other device with transmitting/receiving capabilities page 4, paragraphs [0056] – [0057], pages 4 –5, paragraphs [0058] – [0059], Fig. 2A));

downloading the latest map data and (e) storing said latest map data into said map database as said map data (Configuration database 105 comprises a Location Profile/Table 200A (page 4, paragraphs [0056] – [0057], page 5, paragraph [0065], Fig. 2A, Fig. 2B). The Location Profile/Table 200A (map database) consist of the Network Coverage Map data 203 representing the coverage area for each contracted network, wireless network, such as IEEE 802.11 0 wireless LAN. The information stored in the Network Coverage Map data 203 can be downloaded [Abstract, page 5, paragraphs [0061], [0066], Fig. 2A, Fig. 2B)).

Russell does not teach downloading the latest map data from an ISP server which is connected to said wireless communications network when said communication is carried out. Gray teaches downloading the latest map data from an ISP server which is connected to said wireless communications network when said communication is carried out (Position and/or direction information (latest map data) is retrieved by WAN

Art Unit: 2617

(wireless access network) user from a WAN/WLAN server 50 (ISP server) of a network provider [page 4, paragraphs [0035], [0037] – [0039], Fig. 5]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russell to incorporate downloading the latest map data from an ISP server which is connected to said wireless communications network as taught by Gray to provide an efficient and convenient method for wireless access users to obtain relevant map data, wherein whose device(s) do not have the capability or capacity to generate or create the latest map data, to enable access and utilization of the WLAN network (page 1, paragraph [0010]).

Regarding claims 2, 16, and 18, as applied to claims 1 and 15, Russell further discloses comprising a setting table (Network Profile/table data 205 –see claim 1), wherein said measuring unit calculates a distance between said present position of said mobile station and said setting position of said each wireless LAN access point in response to completion of measuring said present position (GPS Sniffer/Scanner Receiver 103 (measuring unit), which uses radios waves, determines position of device (mobile station) relative to the contracted networks which comprised multiple access points [page 4, paragraphs [0056] – [0057], page 5, paragraph [0061], Fig. 2A]) ; said map data further comprises a maximum transmission distance of said each wireless LAN access point, in addition to said identifier, said connection data and said position data of said each wireless LAN access point (The Network Profile data 205, network identifiers, used to identify the access points within the contracted network, (Abstract, page 5, paragraphs [0065], [0067], page 6, paragraph [0069], Fig. 2A, Fig.

Art Unit: 2617

2B)). The GPS data, GEO, 201 (position data) (page 5, paragraph [0065], Fig. 2A). The GPS data or GEO 201 stores geographical position of the device in relation to the contracted network, wireless network, such as wireless LAN network which comprises numerous access points providing access and connection to the wireless LAN network [Abstract, page 4 paragraph [0052], page 5, paragraph [0066], Fig. 2A]. The Network Coverage Map data 203 representing the coverage area for each contracted network, wireless network, such as IEEE 802.11 0 wireless LAN (Abstract, page 5, paragraph [0066], Fig. 2A, Fig. 2B). The collective information that can be derived from Network profile data, GPS data, and the Network Coverage Map data can be used to determine the distance at which data must be transmitted between the device (mobile station) and access point if required.

said control unit sets said connection data of said optimal wireless LAN access point in said setting table, and said communication unit refers said setting table to communicate with said optimal wireless LAN access point (Digital Signal processor Platform 104 (control unit) receives information from the Network Profile/Table data 205 (setting table) to select the appropriate WLAN access point on position of device (mobile station) in the specified wireless network [page 4, paragraphs [0056] – [0057], page 5, paragraph [0062], page 5, paragraph [0062], page 6, paragraph [0069], Fig. 2A]). The Wideband SDR Transceiver Platform 100 (communication unit), which is used to facilitate communication with many wireless LAN access points within a contracted network, must also rely on the information received by the Digital Radio Processing (DRP) Platform 102 from the Network Profile/Table data (setting table) to establish

Art Unit: 2617

communication with one of many access points [Russell: page 4, paragraphs [0052], [0056] – 0058], page 6, paragraph [0069], Fig. 2A)].

Russell does not teach choosing said optimal wireless LAN access point which is the nearest to the mobile station from said plurality of wireless LAN access points on the condition that said distance is smaller than the maximum transmission distance of each wireless LAN access point. Gray teaches choosing said optimal wireless LAN access point which is the nearest to the mobile station from said plurality of wireless LAN access points on the condition that said distance is smaller than the maximum transmission distance of each wireless LAN access point (Selecting a wireless LAN access point based the one that is nearest to the WAN user (mobile station) thereby reducing the transmission distance between the access point and the user (mobile station). This infers that the transmission distance between the WAN user (mobile station) and the selected wireless LAN access point is inevitably a smaller distance than the maximum transmission distance [page 1, paragraph [0009], pages 3 – 4, paragraph [0034], Fig. 5]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Russell to incorporate choosing said optimal wireless LAN access point which is the nearest to the mobile station from said plurality of wireless LAN access points as taught by Gray to enable a mobile device access and the ability to “utilize the highest bandwidth WLAN-based network to efficiently and quickly transmit, receive, upload or download” data (page 1, paragraph [0008]).

Art Unit: 2617

Regarding claims 3 and 17, as applied to claim 2, the combination above further discloses wherein said measuring unit measures said present position of said mobile station by a communication with GPS (Global Positioning System) satellite or a PHS (Personal Handyphone System) communication (GPS technology is used by the GPS Sniffer/Scanner Receiver 103 (measuring unit), which uses radios waves, determines position of device (mobile station) [page 4, paragraphs [0056] – [0057], page 5, page, paragraph [0061], page 10, paragraph [0106], Fig. 2A]).

Claims 4 – 6, 9 – 11, 13, 14, 19 – 23, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (US Pub. 2004/0249915) in view of H. Gray (US Pub. 2004/0203873) henceforth Gray, further in view of Chaskar et al. (US Pub. 2004/0196808) henceforth Chaskar.

Regarding claim 4, as applied to claim 3, the combination above further discloses a power unit which supplies electric power to said measuring unit, said control unit and said communication unit (Device 10 (mobile station) comprises a power supply 107 (power unit) which supplies power to all the components of the device (mobile station) [Russell; page 4, paragraphs [0056] – [0057], page 5, paragraph [0064], Fig. 2A]), said measuring unit measures said present position by using said radio wave (GPS Sniffer/Scanner Receiver 103 (measuring unit), which uses radios waves, determines position of device (mobile station) [Russell: page 4, paragraphs [0056] – [0057], page 5, paragraph [0061], Fig. 2A]) ;
said control unit refers to said map database and chooses said optimal wireless LAN access point from said plurality of wireless LAN access points, in case that said mobile

Art Unit: 2617

station exists in a location where it is possible to communicate with any of said plurality of wireless LAN access points, said control unit controls said power unit to supply electric power to said communication unit, and said communication unit communicates with said optimal wireless LAN access point based on said connection data of said optimal wireless LAN access point (Russell: Digital Signal processor Platform 104 (control unit) receives information from the Network Profile data 205 (map data) to select the appropriate WLAN access point on position of device (mobile station) in the specified wireless network [page 4, paragraphs [0056] – [0057], page 5, paragraph [0062], page 5, paragraph [0062], page 6, paragraph [0069], Fig. 2A]). The power supply 10 (power unit) provides the power to all the components in the device 10 (mobile station) such as the Digital Signal processor Platform 104 (control unit) in order to facilitate communication with the wireless LAN access points [page 4, paragraphs [0056] – [0057], page 5, paragraph [0064], Fig. 2A]).

in case that said mobile station exists in a location where it is possible to communicate with any of said plurality of wireless LAN access points, said control unit controls said power unit to supply electric power to said communication unit (Discussed is a power supply 107 (power unit) that supplies power to all the components, within the device (mobile station), including the Wideband SDR Transceiver Platform 100 (communication unit) in order to facilitate communication with many wireless LAN access points within a contracted network [Russell: page 4, paragraphs [0052], [0056] – 0058], page 5, paragraph [0064], Fig. 2A]).

Art Unit: 2617

The combination above does not teach wherein in case that said mobile station does not exist in a location where it is possible to communicate with any of said plurality of wireless LAN access points, power unit does not supply electric power to said communication unit. Chaskar teaches wherein in case that said mobile station does not exist in a location where it is possible to communicate with any of said plurality of wireless LAN access points, power unit to stop supplying electric power to said communication unit (Discloses is the mobile terminal (mobile station) use power saving techniques during the initiation of handover, prior to the selection of the access point via an access router, when an access router in immediate area (page 1, paragraph [0005], page 5, paragraph [0047]). It can be deduced that the mobile terminal (mobile station) has the capability to use the same power saving techniques there are no access points, access routers, in the immediate area or available for a handover).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Russell and Gray to incorporate in case that said mobile station does not exist in a location where it is possible to communicate with any of said plurality of wireless LAN access points, power unit does not supply electric power to said communication unit as taught by Chaskar in order to employ power saving technique to "conserve power" and prevent unnecessary depletion of the power supply (page 5, paragraph [0047]).

Regarding claims 5 and 6, as applied to claim 4, the combination above further discloses wherein said map database further contains a setting data provided for each of said plurality of wireless LAN access points (Russell: Configuration database 105

Art Unit: 2617

(map database) the User Personality Profile/Table database 200B (Russell: page 4, paragraphs [0056] – [0057], page 5, paragraph [0065], Fig. 2A, Fig. 2B). The User Personality Profile/Table database 200B consist of the Network Profile data 205 (setting data), network identifiers, used to identify the access points within the contracted network, such as IEEE 802.11 - wireless LAN network (Russell: Abstract, page 5, paragraphs [0065], [0067], page 6, paragraph [0069], Fig. 2A, Fig. 2B)); and the control unit refers to said setting data to select the optimal wireless LAN access point (Russell: Digital Signal processor Platform 104 (control unit) receives information from the Network Profile/Table data 205 (setting data) to select the appropriate WLAN access point on based on the position of device (mobile station) in the specified wireless network [Russell: page 4, paragraphs [0056] – [0057], page 5, paragraph [0062], page 5, paragraph [0062], page 6, paragraph [0069], Fig. 2A]). The power supply 10 (power unit) provides the power to all the components in the device 10 (mobile station) such as the Digital Signal processor Platform 104 (control unit) in order to facilitate communication with the wireless LAN access points [Russell: page 4, paragraphs [0056] – [0057], page 5, paragraph [0064], Fig. 2A)].

indicating a received electric field strength said control unit sets the received electric field strength (Discussed is the implementation of a wireless smartphone as the wireless device (mobile station) (Abstract). A smartphone inherently possesses the capability to detect the received electric field strength. The Digital Signal processor Platform 104 (control unit) which controls baseband and channel signaling processing would also

Art Unit: 2617

control the detection, indication, and setting of the received electric field strength [Russell: page 4, paragraphs [0056] – [0057], page 5, paragraph [0062], Fig. 2A)]; and the setting data is based on a preset received electric field strength to determines a group of wireless LAN access points (Chaskar: Capability map (setting data) that includes geographical information or signal strength information (electric field strength) that relates to a access router which is associated with a specific base station or access point (page 1, paragraphs [0005] – [0006], Fig. 2, page 4, paragraph [0043])). This capability map can also be transmitted to the mobile terminal (mobile station) (page 4, paragraph [0039]). This capability map data is used to select an optimal access router, from a group of access routers, which implies the selection of an optimal access point, base station, as well (Abstract). The selection of an access point via an access router, within a wireless system employing IEEE 802.11 (wireless LAN) technology, (page 4, paragraph [0041]) is based on the detection of the signal strength falling below a threshold, which is defines predetermined (preset) signal strength (received electric field strength) limit (page 5, paragraph [0047])).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Russell and Gray to incorporate a preset received electric field strength to determines a group of wireless LAN access points as taught by Chaskar because signal strength (electric field strength) is an essential parameter when selecting an access point. Signal strength aides in determining the most suitable access point that can has the capability to initiate and

maintain connection with the mobile terminal (mobile station) (page 5, paragraph [0047]).

Regarding claims 9, 10, 19, 20, and 21 as applied to claims 4 and 18, the combination above further discloses wherein said map database further contains a setting data provided each of said plurality of wireless LAN access points to indicate a connection fee and service area, and said control unit refers to said setting data based on a preset connection fee and service area to determines a group of wireless LAN access points and chooses said optimal wireless LAN access point from said group of wireless LAN access points (Discussed is the use of a transaction fee (connection fee) that charged according to where the device (mobile station) is located and which contracted network (preset service area) the device (mobile station) is connected thereby determining which available access points can be selected (Russell: page 2, paragraph [0020], page 10, paragraph [0109] pages 11 – 12, paragraph [0119], [00123])).

Regarding claim 11, as applied to claim 4, the combination above further discloses downloading the latest map data that contains an updated data of said optimal wireless LAN access point in said plurality of wireless LAN access points and storing the latest map data in said map database (Russell: Configuration database 105 comprises a Location Profile/Table 200A (page 4, paragraphs [0056] – [0057], page 5, paragraph [0065], Fig. 2A, Fig. 2B). The Location Profile/Table 200A consist of the Network Coverage Map data 203 (map data) representing the coverage area for each contracted network, wireless network, such as IEEE 802.11 0 wireless LAN. The

Art Unit: 2617

information stored in the Network Coverage Map data 203 can be downloaded or generated by the device 10 (communication unit) [Abstract, page 5, paragraphs [0061], [0066], Fig. 2A, Fig. 2B)]; and wherein said communication unit downloads the latest map data from an ISP server connected to said wireless communications network during said communication. Gray teaches wherein said communication unit downloads the latest map data from an ISP server connected to said wireless communications network during said communication. (Position and/or direction information (latest map data) is retrieved by WAN (wireless access network) user from a WAN/WLAN server 50 (ISP server) of a network provider [page 4, paragraphs [0035], [0037] – [0039], Fig. 5]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Russell and Chaskar to incorporate downloading the latest map data from an ISP server which is connected to said wireless communications network as taught by Gray to provide an efficient and convenient method for wireless access users to obtain relevant map data, wherein whose device(s) do not have the capability or capacity to generate or create the latest map data, to enable access and utilization of the WLAN network (page 1, paragraph [0010]).

Regarding claims 13 and 27, as applied to claims 4 and 19, the combination above further discloses the device 10 (mobile station) comprising a display unit (page 4, paragraphs [0056] – [0057], page 5, paragraph [0064]), wherein said map database stores said map data which further comprises a service data of buildings in a neighborhood of each of said plurality of wireless LAN access

Art Unit: 2617

points (Geographical location information is generated for buildings which may have it's own wireless network (page 4, paragraph [0052], page 7, page 5, paragraph [0066])), and said control unit refers to said setting data based on a preset service area to choose said optimal wireless LAN access point from said group of wireless LAN access points (Discussed is the use of a transaction fee (connection fee) that charged according to where the device (mobile station) is located and which contracted network (preset service area) the device (mobile station) is connected (Russell: page 10, paragraph [0109] pages 11 – 12, paragraph [0119], [00123])).

Regarding claims 14 and 28, as applied to claims 4 and 19, the combination above further discloses a communication table which stores an identifier for a counter station and a keyword; and wherein said communication unit refers to said communication table to inform said counter station of said present position corresponding to said keyword in case that a data in said communication includes said keyword (Russell: Network Profile/Table data 205 also functions as a communication table that stores the SID, System Identification Numbers (identifier) that uniquely identifies a contracted network that may be an Internet network provider (counter station - ISP) and used to communicate with the Internet network provider (counter station - ISP) (page 2, paragraph [0020], page 3, paragraph [0030], page 4, paragraph [0052], page 6, paragraph [0069])).

Claims 7, 8, 12, 24 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (US Pub. 2004/0249915) in view of H. Gray (US Pub. 2004/0203873) henceforth Gray, further in view of Chaskar et al. (US Pub.

Art Unit: 2617

2004/0196808) henceforth Chaskar and Holur et al. (US Pat. 6,957,071) henceforth Holur.

Regarding claims 7, 8, 24, and 25, as applied to claims 4 and 19, the combination above discloses a map database and the control unit refers to the map database to determine a group of wireless LAN access points from which to chooses said optimal wireless LAN access point (Digital Signal processor Platform 104 (control unit) receives information from the Network Profile data 205 to select the appropriate WLAN access point based on the position of device (mobile station) in the specified wireless network [Russell: page 4, paragraphs [0056] – [0057], page 5, paragraph [0062], page 5, paragraph [0062], page 6, paragraph [0069], Fig. 2A]). The combination above does not teach the map database contains a traffic quantity data indicating a traffic quantity in communication of said mobile station determines the optimal wireless LAN access point. Holur teaches the map database contains a traffic quantity data indicating a traffic quantity in communication of said mobile station determines the optimal wireless LAN access point (Wireless network, comprising several access points or base stations, that implements a traffic management system employed to allocate resources and select the appropriate access point or base station. The traffic information needed to make the selection is stored in a traffic table (traffic quantity data). The traffic table also contains information such as bandwidth and quality of service [col. 2, lines 12 – 24, col. 4, lines 16 – 34, lines 53 – 67, col. 5, lines 1 – 11, col. 10, lines 20 – 33]).

Art Unit: 2617

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Russell, Gray, and Chaskar the map database contains a traffic quantity data indicating a traffic quantity in communication of said mobile station determines the optimal wireless LAN access point as taught by Holur the traffic table (traffic quantity data) contains data that is not only essential to the selection of an access point but comprise information that is essential in the sufficient allocation and efficient management of network resources (col. 2, lines 12 – 24).

Regarding claims 12 and 26, as applied to claims 4 and 19, The combination above teaches communication unit communicates with each of said plurality of wireless LAN access points based on a setting data (The Wideband SDR Transceiver Platform 100 (communication unit), which is used to facilitate communication with many wireless LAN access points within a contracted network, must also rely on the information received by the Digital Radio Processing (DRP) Platform 102 from the Network Profile/Table data (setting table) to establish communication with one of many access points [Russell: page 4, paragraphs [0052], [0056] – 0058], page 6, paragraph [0069], Fig. 2A]). The combination above does not teach each wireless LAN access point to keep a QoS (Quality of Service) constant. Holur teaches each wireless LAN access point to keep a QoS (Quality of Service) constant (The traffic table (traffic data) also comprises information relating to the service quality of the wireless network (col. 10, lines 20 – 33, see claim 7). The base station has the task of optimizing the bandwidth by maintaining a constant quality of service (col. 15, lines 50 – 67, col. 16 lines 1 – 8, lines 16 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Russell, Gray, and Chaskar to incorporate each wireless LAN access point to keep a QoS (Quality of Service) constant as taught by Holur because quality of service is essential in the allocation of wireless bandwidth and in the regulation of traffic parameters within a wireless network (col. 17, lines 12 – 21).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sylvia Mack whose telephone number is (571) 270-1212. The examiner can normally be reached Monday – Friday from 8:00 am to 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Art Unit: 2617

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Signature: _____

Sylvia Mack

Examiner / Art Unit 2617



LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER